DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1.   Claims 1, 3-32, 41-43, 45 and 46 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Richardson et al. U.S. 2005/0010638 in view of DSL Evolution-

Architecture Requirements for the Support of QoS Enabled IP Services, Revision 8,

(Applicant submitted in IDS filed on 6-7-2004) and further in view of Bales et al. US

5,675,583.

1.1   Regarding claim 1, Richardson discloses a videoconferencing method using

Quality of Service (QoS) ***and/or*** (examiner note: and/or is interprets as a simple or,

since and/or means ***and OR or***) bandwidth allocation in a Regional/Access Network

(RAN) (Fig. 3; Fig. 8A) (section 0056-0057; 0060) that provides end-to-end transport

between an Application Service Provider (ASP) (Fig. 8A, 205; videoconference server)

and Customer Premises Equipment (CPE) (Fig. 8A: 802, 806) (section 0094-0103), the

method comprising:

        receiving, by the ASP (i.e. videoconference server), a request for a

videoconference designating a plurality of participants (i.e. unicast session when two

participants are involved or multicast session when more than two participants are

involved) from one of the plurality of participants (section 0095; 0200-0201; 0206; 0209);

requesting, by the ASP (i.e. videoconference server), a desired QoS and/or

bandwidth allocation for the videoconference for the plurality of participants from the

RAN using at least one call (i.e. policy server including policy information for a

requested videoconference session) responsive to the received request for a

videoconference (section 0067-0068; 0103; 0138; 0201; 0205-0206); and

activating the videoconference for the plurality of participants using the desired

QoS and/or bandwidth allocation (section 0103; 0201; 0205 -0206).

Richardson does not disclose an Application Programming Interface (API) call

responsive to the received request for a videoconference.

DSL Evolution discloses a method using Quality of Service (QoS) and/or

bandwidth allocation (Section 4.2.2.2, page 12) in a Regional/Access Network (RAN)

(Section 4.2.5, Fig. 11: Regional/Access Network, page 17; Fig. 20: Access Network,

page 30) that provides end-to- end transport between an Application Service Provider

(ASP) (Fig. 2: ASP Network, Section 3.2, page 7) and Customer Premises Equipment

(CPE) (Section 4.2.5, page 17; Fig. 20: CPE, page 30), the method comprising:

receiving, by the ASP, a request for a videoconference (Section 2.1-2.2, pages 2-

4; Section 3.2: The Application Service Provider (ASP), page 7; Section 5.1, page 26;

Section 5.3.1: Phase 1, page 30; Section C. 1.1: CPE, page 45);

requesting, by the ASP, a desired QoS and/or bandwidth allocation for the

videoconference for participants (i.e. users) from the RAN using at least one Application

Programming Interface (API) call responsive to the received request for a

videoconference (Section 3.2: The Application Service Provider (ASP), page 7; Section

3.3.1, page 8; Section 4.2.2.1-4.2.2.2, pages 11-12; Section 7.2, page 35); and

activating the videoconference for the participants using the desired QoS and/or

bandwidth allocation (Section 4.2.2.2, page 12), wherein the API includes an

Application-to-Network Interface (ANI) (Fig. 2: ANI, page 7; Section 4.2.2.1-4.2.2.2, Fig.

5: A10-ASP, pages 11-12) that is defined between the RAN and the ASP (Fig. 2, page

7; Fig. 5, page 11).

Again, Richardson discloses the claimed method except Richardson uses at

least one call responsive to the received request for a videoconference rather than one

API call. However, the claimed feature of an API call responsive to the received request

for a videoconference was old and well known in the art. DSL Evolution clearly teaches

such concept.

Thus, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the method of Richardson to include an API call

responsive to the received request for a videoconference as taught by DSL Evolution. In

other words, one of ordinary skill in the art would have been lead to make such a

modification of Richardson to include an API call responsive to the received request for

a videoconference, such as the API call of DSL Evolution, to the RAN of Richardson so

the RAN of Richardson can utilize an interface to set up a videoconference session

between the ASP and the RAN and allocate QoS and/or bandwidth allocation for the

session.

Richardson in view of DSL Evolution do not disclose requesting capabilities

associated with at least one of the participants from the RAN; selecting a desired QoS

and/or bandwidth allocation based on the capabilities.

Bales discloses a videoconferencing method comprising:

requesting capabilities associated with at least one of the participants from a

switch (part of a regional /access network, or RAN) (col. 5, line 63 – col. 6, line 2);

selecting a desired bandwidth for a video/audio conference call based on the

capabilities (note: in Bales' example, terminal 104 has only audio capability, and a

conference is conducted in audio only, however, it would have been obvious that when

terminal 104 has audio and video capabilities, the conference would have been a video

conference (col. 5, line 38 – col. 6, line 6; col. 24, lines 17-21).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the method of Richardson in view of DSL Evolution to

include requesting capabilities associated with at least one of the participants from the

RAN; selecting a desired QoS and/or bandwidth allocation based on the capabilities as

taught by Bales. In other words, one of ordinary skill in the art would have been lead to

make such a modification of Richardson in view of DSL Evolution to include requesting

capabilities associated with at least one of the participants from the RAN; selecting a

desired QoS and/or bandwidth allocation based on the capabilities, such as the

requesting capabilities associated with at least one of the participants from the RAN;

selecting a desired QoS and/or bandwidth allocation based on the capabilities of Bales,

to the method of Richardson in view of DSL Evolution in order to set up desired QoS

and/or bandwidth before a videoconference begins.

1.2   Regarding claim 3, please see (Richardson: section 0157, 0195-0199; DSL

Evolution: Section: 4.2.1.2, page 11; Section 7.2, page 35).

1.3   Regarding claim 4, please see (Richardson: section 0205-0206, 0211-0212; DSL

Evolution: Section 2.2., pages 2-4; Section 5.1-5.1.1, pages 26-27).

1.4   Regarding claim 5, please see (Richardson: section 0059, 0081-0082; DSL

Evolution: Section: 4.2.7.2, page 24).

1.5   Regarding claim 6, please see (Richardson: section 0055, 0065, 0069).

1.6   Regarding claim 7, please see (Richardson: section 0205).

1.7   Regarding claim 8, please see (Richardson: Fig. 2, 210; section 0056, 0068; DSL

Evolution: Section 3.1, page 4; Fig. 12: BRAS, page 18; Section 4.2.5.2, pages 18-19).

1.8   Regarding claim 9, please see (Richardson: section 0117-0121; DSL Evolution:

Section: 4.2.7.2, page 24).

1.9   Regarding claim 10, please see (Richardson: section 0063, 0065, 0138, 0164-

0166, 0186, 0207; DSL Evolution: Section 4.2.5.2, page 18).

1.10   Regarding claim 11, please see (Richardson: section 0138, 0154, 0158, 0163-

0166, 0186).

1.11   Regarding claim 12, please see (Richardson: section 0138, 0154, 0158, 0163-

0165, 0187, 0186).

1.12   Regarding claim 13, please see (Richardson: section 0153, 0164-0166, 0186,

0205-0206; DSL Evolution: Section 5.3.1-5.3.2.3, pages 28-34).

1.13   Regarding claim 14, please see (Richardson: section 0101-0103, DSL Evolution:

Section 4.2.1.1-4.2.1.2, pages 10-11; Section 4.2.5.1, page 17).

1.14   Regarding claim 15, please see (Richardson: section 0094-0099, 0201; DSL

Evolution: Section 2.1-2.2, pages 2-4; Section 3.2, page 7; Section 5.1, page 26;

Section C. 1.1 : CPE, page 45).

1.15   Regarding claim 16, please see (Richardson: section 0164-0166, 0186, 0205-

0206, 0211- 0212; DSL Evolution: Section 4.2.5.2, page 18).

1.16   Regarding claim 17, please see (Richardson: section 0056, 0067, 0092, 0164-

0166, 0186, CPN: Fig. 2, 225, RG: Fig. 2, 240, Fig. Ic, 138; DSL Evolution: Section 2.2.,

pages 2-4; Section 3.3.4, page 8; Fig. 14, page 21; Section 4.2.7, pages 22-23; Section

4.2.7.2, pages 23-24; Section 5.1-5.1.1, pages 26-27).

1.17   Regarding claim 18, please see (Richardson: section 0142-0147; D SL Evolution:

Section 4.2.1.1-4.2.2.2, pages 10-12).

1.18   Regarding claim 19, please see (Richardson: section 0153, 0205-0206; DSL

Evolution: Section 5.3.1-5.3.2.3, pages 28-34).

1.19   Regarding claim 20, please see (Richardson: section 0164-0166, 0186, 0205-

0206, 0211 - 0212).

1.20   Regarding claim 21, please see (Richardson: section 0054, 0158, 0164-0166,

0186; DSL Evolution: Appendix B, pages 40-43).

1.21   Regarding claim 22, please see (Richardson: section 0164-0166, 0178, 0186,

0205-0206, 0211-0212).

1.22   Regarding claim 23, please see (Richardson: section 0184-0186).

1.23   Regarding claim 24, please see (Richardson: Fig. Ic, 136, section 0092; DSL

Evolution: Section 4.2.7.1-4.2.7.2, pages 23-24).

1.24   Regarding claim 25, please see (Richardson: section 0205-0206; DSL Evolution:

Section 4.2.5.2, page 18; Section 5.3.2, page 31).

1.25   Regarding claim 26, please see (Richardson: section 0164-0166, 0186, 0205-

0206).

1.26   Regarding claim 27, please see (Richardson: section 0060; DSL Evolution:

Section 4.2.7.1-4.2.7.2, pages 23-24).

1.27   Regarding claim 28, please see (Richardson: section 0164-0166, 0186; DSL

Evolution: Section 4.2.7.2, page 24).

1.28   Regarding claim 29, please see (Richardson: section 0060, 0101-0102, 0164-

0166, 0186, 0205; DSL Evolution: Section 4.2.7.2, page 24).

1.29   Regarding claim 30, please see (Richardson: section 0101-0102, 0205-0206;

DSL Evolution: Section 4.2.5-4.2.5.1, pages 17-18).

1.30   Regarding claim 31, please see (Richardson: section 0065, 0101-0102, 0205-

0206).

1.31   Regarding claim 32, please see (Richardson: section 0094-0099, 0201, 0205).

1.32   Regarding claim 41, please see the rejection to claim 1 above to reject the

videoconferencing system in claim 41; (Richardson: authentication -> see membership

of each participant and public/private call: section 0063; 0065; Bales: requesting desired

QoS and/or bandwidth allocation, col. 5, line 38 – col. 6, line 6).

1.33   Regarding claim 42, please see (Richardson: section 0205-0206, 0211-0212;

DSL Evolution: Section 2.2., pages 2-4; Section 5.1-5.1.1, pages 26-27).

1.34   Regarding claim 43, please see (Richardson: section 0205-0206; DSL Evolution:

Section 2.2, page 4; Section 4.2.2.2, page 12; Section 7.1, page 35).

1.35   Regarding claim 45, please see (Richardson: MCU: videoconference session

controller; section 0205-0206).

1.36   Regarding claim 46, please see (Richardson: section 0205-0206).

2.   Claims 33-40 and 47-51 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Richardson et al. U.S. 2005/0010638 in view of DSL Evolution-

Architecture Requirements for the Support of QoS Enabled IP Services, Revision 8,

hereinafter DSL Evolution (Applicant submitted in IDS filed on 6-7-2004).

2.1   Regarding claim 33, Richardson discloses a videoconferencing method using

Quality of Service (QoS)and/or bandwidth allocation in a Regional/Access Network

(RAN) (Fig. 3; Fig. 8A) (section 0056-0057; 0060) that provides end-to-end transport

between an Application Service Provider (ASP) (Fig. 8A, 205; videoconference server)

and a Customer Premises Equipment (CPE) (Fig. 8A: 802, 806) (section 0094-0103),

the method comprising:

        receiving, from the ASP (i.e. videoconference server), at the RAN a modify QoS

and/or bandwidth allocation message for a videoconference for a plurality of participants

(i.e. unicast session when two participants are involved or multicast session when more

than two participants are involved)(section 0099-0103; 0142-0147; 0164-0166; 0200-

0201; 0205-0206);

        identifying, by the RAN, the participants and at least one CPE associated with

the participants (section 0200-0201; 0205-0206; 0209);

establishing, by the RAN, a control signal application flow, a video application

flow, and an audio application flow for each of the identified participants (section 0067-

0068; 0142-0147; 0153; 0205-0206);

updating the RAN with QoS and/or bandwidth information for the established

application flows based on the received modify QoS and/or bandwidth allocation

message (section 0067-0068; 0134; 0142-0147; 0164-0166; 0205-0206); and sending

the QoS and/or bandwidth information for the established application flows to the

identified at least one CPE (section 0142-0147; 0164-0166; 0205-0206).

Richardson does not disclose the RAN includes a regional broadband network, a

broadband remote access server and an access network.

DSL Evolution discloses a method using Quality of Service (QoS)and/or

bandwidth allocation (Section 4.2.2.2, page 12) in a Regional/Access Network (RAN)

(Section 4.2.5, Fig. 11: Regional/Access Network, page 17; Fig. 20: Access Network,

page 30) that provides end-to- end transport between an Application Service Provider

(ASP) (Fig. 2: ASP Network, Section 3.2, page 7) and Customer Premises Equipment

(CPE) (Section 4.2.5, page 17; Fig. 20: CPE, page 30), the method comprising:

receiving, from the ASP, at the RAN a modify QoS and/or bandwidth allocation

message for a videoconference for participants (i.e. users) (Section 2.2., pages 2-4;

Section 5.1-5.1.1, pages 26- 27);

identifying, by the RAN, the participants and at least one CPE associated with

the participants (Section 3.2: The Application Service Provider (ASP), pages 7-8;

Section 4.2.7, pages 22-23; Section 7.1-7.2, page 35);

establishing, by the RAN, a control signal application flow, a video application

flow, and an audio application flow for each of the identified participants (Section 5.3.1-

5.3.2.3, pages 28-34);

updating the RAN with QoS and/or bandwidth information for the established

application flows based on the received modify QoS and/or bandwidth allocation

message (Section 2.2., pages 2-4; Section 5.1-5.1.1, pages 26-27); and

sending the QoS and/or bandwidth information for the established application

flows to the identified at least one CPE (Section 3.2: The Application Service Provider

(ASP), pages 7-8; Section 4.2.7, pages 22-23; Section 5.3.1-5.3.2.3, pages 28- 34;

Section 7.1-7.2, page 35), wherein the RAN includes a regional broadband network, a

broadband remote access server and an access network (Section 3.1, page 4; Section

4.2.5- 4.2.5.3, pages 17-19; Fig. 12: Regional Broadband Network, BRAS, Access

Network, page 18).

Again, Richardson discloses the claimed method except Richardson discloses a

RAN rather than the RAN includes a regional broadband network, a broadband remote

access server and an access network. However, the claimed feature of the RAN

includes a regional broadband network, a broadband remote access server and an

access network was old and well known in the art. DSL Evolution clearly teaches such

concept.

Thus, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the method of Richardson to include the RAN includes a

regional broadband network, a broadband remote access server and an access network

as taught by DSL Evolution. In other words, one of ordinary skill in the art would have

been lead to make such a modification of Richardson to include the RAN includes a

regional broadband network, a broadband remote access server and an access

network, such as the RAN of DSL Evolution, to the RAN of Richardson so the RAN of

Richardson can support multiple videoconference sessions for participants and allocate

QoS and/or bandwidth allocation for the session.

2.2   Regarding claim 34, please see (Richardson: section 0067-0068, 0103, 0138,

0201, 0205- 0206; DSL Evolution: Section 3.2: The Application Service Provider (ASP),

page 7; Section 3.3.1, page 8; Section 4.2.2.1-4.2.2.2, pages 11-12; Section 7.2, page

35).

2.3   Regarding claim 35, please see (Richardson: section 0205-0206; DSL Evolution:

Section 2.2, page 4; Section 4.2.2.2, page 12; Section 7.1, page 35).

2.4   Regarding claim 36, please see (Richardson: section 0157, 0195-0199; DSL

Evolution: Section: 4.2.1.2, page 11; Section 7.2, page 35).

2.5   Regarding claim 37, please see (Richardson: section 0142-0147; D SL Evolution:

Section 4.2.1.1-4.2.2.2, pages 10-12).

2.6   Regarding claim 38, please see (Richardson: section 0153, 0205-0206; DSL

Evolution: Section 5.3.1-5.3.2.3, pages 28-34).

2.7   Regarding claim 39, please see (Richardson: section 0056, 0067, 0092, 0164-

0166, 0186, 0205-0206, 0211-0212, CPN: Fig. 2, 225, RG: Fig. 2, 240, Fig. lc, 138; DSL

Evolution: Section 2.2., pages 2-4; Section 3.3.4, page 8; Fig. 14, page 21; Section

4.2.7, pages 22-23; Section 4.2.7.2, pages 23-24; Section 5.1-5.1.1, pages 26-27).

2.8   Regarding claim 40, please see (Richardson: section 0054, 0158, 0164-0166,

0186; DSL Evolution: Appendix B, pages 40-43).

2.9   Regarding claim 47, please see the rejection to claim 33 above to reject the

videoconferencing system in claim 47.

2.10   Regarding claim 48, please see (Richardson: section 0067-0068, 0103, 0138,

0201, 0205- 0206; DSL Evolution: Section 3.2: The Application Service Provider (ASP),

page 7; Section 3.3.1, page 8; Section 4.2.2.1-4.2.2.2, pages 11-12; Section 7.2, page

35).

2.11   Regarding claim 49, please see (Richardson: section 0205-0206; DSL Evolution:

Section 2.2, page 4; Section 4.2.2.2, page 12; Section 7.1, page 35).

2.12   Regarding claim 50, please see (Richardson: section 0157, 0195-0199; DSL

Evolution: Section: 4.2.1.2, page 11; Section 7.2, page 35).

2.13   Regarding claim 51, please see (Richardson: section 0067-0068; 0164-0166,

0186, 0205- 0206, 0211-0212).

Response to Arguments

3.   Applicant's arguments with respect to claims 1, 3-32, 41-43, 45 and 46 have

been considered but are moot in view of the new ground(s) of rejection.

4.   Applicant's arguments filed on 09/23/2009 with respect to claims 33-40 and 47-

51 have been fully considered but they are not persuasive.

Applicant argues that the prior art does not teach the limitation of: "a control

signal application flow, a video application flow, and an audio application flow for each

of the identified participant".

Examiner respectively disagrees. As acknowledged by the applicant in the

Remarks that Richardson discloses: "the present invention provides a messaging

system that allows a server to control video encoding parameters of each individual

client based on messages sent from a videoconference session controlling client or

network equipment." (Richardson, paragraph 0205.) Additionally, paragraphs 0067-

0068 appear to describe a network architecture database that may be used by a

videoconference server to "effectively manage the bandwidth and quality of service."

(Richardson, paragraph 0067.) Further, paragraph 0153 of Richardson describes that

the "client application is responsible for interacting with a user, exchanging of

multimedia content with other client applications, and for managing calls with the server

application."   Since a server (part of a RAN) control the audio and video flow of each

conferee, Richardson obviously teaches the claimed: "a video application flow, and an

audio application flow for each of the identified participant". Further Richardson

teaches: "the present invention provides a messaging system that allows a server to

control video encoding parameters of each individual client based on messages sent

from a videoconference session controlling client or network equipment", which

obviously reads on the claimed: "a control signal application flow". Thus the prior art

teaches the claimed limitations recited in the independent claims 33 and 47.

Conclusion

5.   Any inquiry concerning this communication or earlier communication from the

examiner should be directed to Simon Sing whose telephone number is 571-272-7545.

The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Fan Tsang, can be reached at 571-272-7547. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300. Any

inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 571-272-2600.

Simon Sing/

Primary Examiner, Art Unit 2614